

SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/undertaking

1.1. Product name: Professional Oil&Grease remover

1.2. Product description: detergent in spray form for removal of tough grease, highly effective cold degreaser to clean cookers, oven pans, and stainless pots

1.3. Manufacturer & Supplier: Mäkklingen CE, s.r.o.

Address: Lučová 5329/46, 94501 Komárno, Slovakia

Phone number: Tel.: +421 917 749 637

E-mail: info@makklaringen.com

www.makklaringen.com

1.4. Emergency Call: NATIONAL TOXICOLOGICAL INFORMATION CENTRE

University Hospital Bratislava

Department of Occupational Medicine and Toxicology

Limbová 5, 833 05 Bratislava, Slovakia

emergency telephone number: +421 2 54 774 166

e-mail: ntic@ntic.sk

2. Hazard identification

The product is corrosive. Skin contact causes severe irritation and produces burns. It is corrosive to eye tissues, can cause severe eye damage. Inhalation of high concentration of the spray/mist may produce severe irritation, burns to the upper respiratory tract and lungs.

The product is classified as a hazardous preparation

2.1. Classification under CLP: Acute Tox. 4, H302, Skin Corr. 1A, H314

2.2. Labeling: necessary pictogram: GHS05 and GHS07

DANGER



H-phrases:

H290 May be corrosive to metals.

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage.

EUH071 Corrosive to the respiratory tract.

P-phrases:

P102 Keep out of reach of children.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Call a POISON CENTER or doctor/physician.

P501 Dispose of contents/container to according to local regulations.

Hazard determining components: potassium hydroxide, 2-amino ethanol, 2-butoxyethanol

Composition according to the 648/2004 / EC: <5% amphoteric surfactants, <5% phosphates

2.3. Other information: Before using this product perform a color test. Do not apply it to clean the burner head of gas ovens, or aluminum surfaces. Always use gloves for hand protection.

3. Composition/information on ingredients

Hazardous components Concentration Classification, H phrases* Exposure limits**

Potassium hydroxide	CAS No: 1310-58-3	EU No: 215-181-3	20-25%	Met. Corr. 1, H290; Skin Corr. 1A, H314
Ethanolamine	CAS No: 141-43-5	EU No: 205-483-3	1-<5%	Acute Tox.4 (oral) 4,H302 Acute Tox. 4(oral, dermal, inhal.);H302, H312, H332; Skin Corr. 1B, H314
2-Butoxyethanol	CAS No: 111-76-2	EU No: 203-905-0	1-<5 %	Acute Tox. 4 (oral, dermal, inhal.); H302, H312, H332; SKIN IRRIT. 2, H315; Eye Irrit. 2, H319
Pentanátrium-trifoszfát	CAS No: 7758-29-4	EU No: 231-838-7	1-<5%	Eye Irrit. 2, H319; Skin Irrit. 2, H315;STOT SE 3, H335
Propylene glycol	CAS No: 57-55-6	EU No: 200-338-0	1-<5%	-
Cocamidopropyl betaine	CAS No:-	EU No: 931-296-8	< 1%	Eye Dam.1;H318
Xanthan gum	CAS No:11138-66-2	EU No: 234-394-2	< 1%	-

The other components are not dangerous, or their concentrations are low enough not to be taken into consideration in the classification and labeling of the product according to the relevant EC regulations.

* Find explanation of the meaning of R phrases for the pure substance(s) in Section 15.

** Details are in Section 8.

4. First Aid measures

4.1. General information: Move victim away from the source of exposure. Remove contaminated shoes, socks and clothing and they should be cleaned or washed before re-use. To drink water or to induce vomiting is forbidden if the victim is unconscious or suffers from convulsions. If toxic symptoms develop or suspicion of intoxication arises call a poison control centre or physician immediately. Show the label and the safety data sheet of the product to the physician.

4.2. If inhaled: Move victim to fresh air, keep in rest and warm, dragging garments should be loosened. Seek immediate medical attention.

Skin: Remove contaminated clothing and shoes. Wash off the affected skin with cold running water and soap thoroughly for at least 20 minutes. If corrosive injuries happen, immediate medical help or hospitalization is necessary. Wash the contaminated clothing before re-use.

Eye: Flush eyes with large amount of water holding the eyelids wide open and moving eyeballs continuously for at least 15 minutes. Seek ophthalmologist immediately, the product is a strong alkaline solution; it can cause serious eye damage.

If swallowed: Wash out mouth cavity with water if the victim is conscious. DO NOT INDUCE vomiting. Have conscious person drink several glasses of water to dilute the ingested strongly alkaline product. Never give an unconscious person anything to ingest. If foam appears, do not make victim drink water, and take care not to let foam get into the lung. Seek immediate medical attention. Show the label and the safety data sheet of the product to the physician.

5. Fire fighting measures

5.1. Suitable extinguishing media: water spray, dry chemical; adapt fire fighting operation to surrounding fire

5.2. Hazardous combustion gases: carbon monoxide, carbon dioxide, nitrogen oxides

5.3. Other informations:The product is not considered to be a fire hazard (aqueous solution).

6. Accidental release measures

6.1. Person-related precautionary measures: See Section 8. Avoid contact and inhalation of the product. Keep unprotected person away.

6.2. Spill/release: Pay attention to danger of slipping. In the event of a major spillage, absorb large quantities of liquid into inert material with extreme absorbing properties, such as sand, peat and remove it in closed containers for disposal in accordance with the local regulations. Wash off remaining material with large amount of water. The product is strongly alkaline; prevent it from mixing with acids, acidic preparations (product reacts violently to acids). In case of minor spillage the usual clean-up methods are suitable.

6.3. Environmental precautions: Prevent spilled material or wash water from entering into drains, surface waters, sewers, groundwater systems.

7. Handling and storage

7.1. Handling: Work watchfully! Prevent eye, skin contact and accidental ingestion. Do not breathe the mist/spray of the product! Do not mix it with other detergents! Before using this product perform a color test. Do not apply it to clean the burner head of gas ovens, or aluminum surfaces. Always use gloves for hand protection!

7.2. Storage: Store upright in a cool, well ventilated area, frost-free, away from strong acids. Keep away from food, feed, reach of children and pets, and heat sources.

8. Exposure controls/personal protection

8.1. control parameters

Occupational exposure limits:

Potassium hydroxide: TLV: 2 mg/m³ (ACGIH 2000),

AK: 2 mg/m³; CK: 2 mg/m³.

2-Butoxyethanol: TLV: 20 ppm (100 mg/m³) (ACGIH 2004),

AK: 98 mg/m³; CK: 246 mg/m³.

Ethanolamine: TLV: 3 ppm (7.5 mg/m³) as TWA, 6 ppm (15 mg/m³) as STEL (ACGIH 2002).

TLV: threshold limit value, STEL: short term exposure level, TWA: 8 hrs time-weighted average

AK: permitted average concentration, CK: permitted peak concentration Hungarian EüM–SZCSM Decree No 25/2000.

DNEL: DERIVED NO EFFECT LEVEL

Potassium hydroxide, long-term inhalation exposure, local effect: 1 mg / m³

2-aminoethanol, long-term inhalation, topical effect: 3.3 mg / m³

2-butoxyethanol, long-term inhalation, systemic effects: 98 mg / m³

2-butoxyethanol, long-term dermal exposure, systemic effects: 75 mg / kg

PNEC: PREDICTED NO EFFECT CONCENTRATION

2-butoxyethanol : freshwater sediment: 34.6 mg / kg,

Sea water sediment 3.46 mg / kg

fresh water: 8.8 mg / l;

Sea water: 0.88 mg / l

8.2. Technical measures:

- Ensure that the usual protective measures of handling chemicals are kept.
- Ensure sufficient ventilation.
- Provide appropriate personal protective equipments.

8.3. Hygiene measures:

- Do not eat, drink or smoke while handling.
- Wash hand thoroughly after handling.

8.4. Personal protective equipments:

- Respiratory system: Using protective mask is mandatory to protect against alkaline spray of the product if it is used in a close space, or applied by spraying, or if ventilation is weak.
- Skin protection: Wear protective clothes and chemical resistant gloves (nitrile, neoprene, butyl).
- Eye protection: Wear suitable eye protection when working.
- Running warm and cold water must be provided during and after working hours.

9. Physical and chemical properties

Physical form: liquid

Color: pale yellow, clear

Odor: characteristic, minty

Density (27 C): 1.13 0.08 g/cm³

pH: 12.2 + 0.30 (1% solution in distilled water, 25 C)

Free alkali: 13.2 + 0.8 mg KOH/g product

Total alkali: 14.3 + 0.8 mg KOH/g product

Solubility in water: unlimited

Flash point: 75 C

10. Stability and reactivity

10.1. Chemical stability: The product is stable under normal condition (ambient temperature and atmospheric pressure).

10.2. Conditions to avoid: heat, may decompose by heating

10.3. Materials to avoid: strong acids, acidic detergents, reducing materials; corrodes copper and aluminum; do not mix with other products, and with acids. Violent exothermic reaction may occur with acids.

11. Toxicological information

11.1. There is no acute oral LD₅₀ value for the product. Toxicological properties are determined by its strong alkalinity. It is corrosive, can produce burns. The assessment of the toxicological properties of the product is based upon data of components and classification criteria of Dir. 1999/45/EC.

11.2. Effects of exposure:

Ingestion: severe damage in the mucous membrane of gastrointestinal tract

Inhalation spray/mist of the product: severe burns of membrane of respiratory tract

Skin: irritates strongly, causes burns

Eye: strongly irritating to eyes, causes burns that results in serious damage

The product does not contain any carcinogenic components.

11.3. Acute oral LD₅₀ values of the components:

Potassium hydroxide: LD₅₀ (rat): 365 mg/kg bw (SAX)

Ethanolamine: LD₅₀ (rat): >1090 mg/kg bw

2-Butoxyethanol: LD₅₀ (rat): 560 mg/kg bw

12. Ecological information

12.1. Toxicity:

Potassium hydroxide: LC₅₀ (fish, 96 h): 56 140 mg / l and NOEC (fish, 24 h): 28 mg / l

LC₅₀ (Daphnia magna, 48 h): 76 mg / l

EC₅₀ (Photobacterium phosphoreum, 15 min): 22 mg / l

2-butoxyethanol LC₅₀ (Fish, 96 h): 1474 mg / l

EC₅₀ (Daphnia magna, 48 h): 1,550 mg / l

EC₅₀ (algae, 72 h): 911 mg / l

2-aminoethanol: LC₅₀ (Fish, 96 h): 349 mg / l

EC₅₀ (Daphnia magna, 48 h): 65 mg / l

EC₅₀ (Scenedesmus subspicatus, 72 h): 2.5 to 22.5 mg / l

12.2. Bioaccumulation: No data inorganic components of the product does not bio-accumulate.

12.3. Mobility in soil: No data.

12.4. PBT, vPvB assessment: No data.

12.5. Other information: Some components of the product (e.g. potassium hydroxide) are toxic to fish and planktons. Large quantities of product and its waste must not be poured to sewers, drains, and natural waterways without prior diluting or neutralization. Pay attention to pH of waste water if you enter acidic or alkaline products to the public drainage system. The pH value must remain in the range of 6 to 10. Outlying pH value may damage the sewage system, or the biological waste water treatment systems.

Mäkklingen CE, s.r.o.

Professional Oil&Grease remover

13. Disposal considerations

Chemicals must be disposed of in compliance with national regulations.

Review national provisions prior to disposal.

EWC code: 20 01 15 waste from the manufacture, formulation, supply and use of fats, grease, soaps, detergents, disinfectants and cosmetics

EWC code: 15 01 02 wastes not otherwise specified

14. Transport information

According to the international transport regulations:

ADR/RID: UN-number: 1719

Proper shipping name: CAUSTIC ALKALI LIQUID, N.O.S.

Packing Group III; Label: 8

Limited and discount rate 5 liters and E1

Class: 8 Classification code: C5 Hazard identification number: 80 Tunnel restriction code: 2 (E)

15. Regulatory information

Relevant Community legislation, (1907/2006/EC) and amendments (987/2008 , 134/2009/EK , 552/2009/EK , 453/2010/EK) REACH Regulation DSD and DPD Directive, 67/548/EEC and 1999/45/EC CLP Regulation (1272/2008/EC) , as amended Biocidal pieces of legislation: Directive 98/8/EC No 1451/2007/EK Detergent Regulation, 648/2004/EC and its amendments Relevant national legislation Chemical safety: 2005th CXXVII . to 2004. XXVI . amended by Law 2000th XXV . Dangerous for the environment , the 44/2000. (. XII.27) Ministry of Health and its amendments ;25 / 2000th (IX.30 .) ACGIH TLV band and its amendments . Health and safety: the 2007th CLXII year . Law for 2004. Act XI . Law and the 1997th CII . amended by Law 1993rd XCIII . Occupational Safety and Health Act. Biocides Regulation 38 / 2003rd (. VII.7) ESzCsSM Ministry of Agriculture , Ministry of Environment co - regulation and amendments thereto; Waste : . (. Chapter 15) 98/2001 Decree , and the 16 / 2,001th KöM (VII.18 .) Fire protection: the 1996 Convention. Act XXXI . Law on protection against fire, technical rescue and fire brigades , the 9 / of 2008. ÖTM (II.22 .) .

16. Other information

The safety data sheet is characterized by the safety requirements of the product and is not intended to guarantee certain of its properties, is not a substitute for product specifications. The information, data and recommendations contained in this safety data sheet is based on our best knowledge and awareness, and they are accurate, we know to be correct at time of publication and believe. The user takes responsibility for themselves as to the application and use of the product. The data does not imply any legal liability or responsibility for the consequences of any circumstances, use or misuse of the result.

Explanations used for the hazard

Met. Corr.1: Corrosive to metals category 1

Eye Irrit.2 Eye irritation, category 2

Skin Irrit. 2 Skin Irritation category 2

Acute Tox.4 Acute toxicity category 4

Skin Corr.1A Corrosion category 1

STOT SE 3 Organ toxicity, single exposure. category 3

Eye Dam.1 Eye damage, category 1

H phrases (indications of danger) used in step 3 Safety Data Sheet:

H290 May be corrosive to metals.

H302 Harmful if swallowed

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Skin irritation

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

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